



Federal Accounting Standards Advisory Board

February 24, 2004

To: Members of the Board
From: Rick Wascak, Staff
Through: Wendy M. Comes, Executive Director
Subj: Oil and Gas Project ¹

The objectives for the March 2004 Board meeting regarding oil and gas are:

1. Discuss staff's proposal to capitalize estimated proved reserves for oil and gas.
2. Obtain general agreement on the proposal from the Board.
3. Discuss staff's "next steps" to develop an accounting methodology for asset and revenue recognition.

At the conclusion of discussions at the December 2003 Board meeting regarding oil and gas, staff was asked to perform the following tasks for the March 2004 Board meeting:

1. Gather information pertaining to the revenue streams for other natural resources and develop a sample schedule presenting their magnitude in comparison to each other.

A schedule presenting this information is provided as Attachment A on page 7 of this paper.

2. Revise the proposed disclosures. Specifically, to make the proposed narrative requirements more descriptive and to remove the detailed collection and distribution information.

Staff believes that, based on the proposal presented in this paper, the sections of the proposed disclosures which staff was asked to revise are no longer relevant. As a result, staff proposes to delete them. See Attachment B on page 8 of this document.

3. Pursue capitalization of the anticipated production stage revenue stream, which will include researching accounting literature that deals with long-term contracting and leasing in relation to measurement and recognition criteria.

¹ The staff prepares Board meeting materials to facilitate discussion of issues at the Board meeting. This material is presented for discussion purposes only; it is not intended to reflect authoritative views of the FASAB or its staff. Official positions of the FASAB are determined only after extensive due process and deliberations.

The Energy Information Administration (EIA), Department of Energy, provides annual estimates of proved oil and gas reserves. Currently, the EIA does not breakout and distinguish between the quantity of the proved reserves from lands under Federal jurisdiction and the quantity of proved reserves from other lands. During its research, staff learned that the EIA has now been tasked with the requirement to provide this information. Therefore, because estimates of proved oil and gas reserves from lands under Federal jurisdiction would be available, staff proposes that an estimated value for proved oil and gas reserves from lands under Federal jurisdiction be capitalized in place of capitalizing the anticipated production stage revenue stream.

Immediately following is a list of questions to help focus discussions during the March meeting, followed by a paper presenting information relating to:

- Staff proposal
- An overview of the EIA's mission;
- Valuing the proved oil and gas reserves;
- Recognition of proved oil and gas reserves as an asset; and,
- Pending questions and issues regarding revenue recognition and asset revaluation. Further staff research is required before presenting alternatives and proposed recommendations.

If you have any questions, please contact me on 202 512-7363 or at wascakr@fasab.gov.

FOCUS QUESTIONS

Presented below are questions to help focus discussions during the meeting:

1. Do Board members agree that proved oil and gas reserves meet the definition of assets?
2. Do Board members agree that proved oil and gas reserves meet the recognition criteria?
3. Do Board members agree with the proposal to capitalize an estimated value for proved oil and gas reserves from lands under Federal jurisdiction?
4. Do Board members agree with the proposed formulae for valuing proved oil and gas reserves?

For Oil Reserves: Barrels of Proved Oil Reserves multiplied by Price Per Barrel multiplied by Royalty Rate = Estimated Projected Royalty Revenue on (Value of) Proved Oil Reserves as of the end of the current reporting period.

For Gas Reserves: Cubic Feet of Proved Gas Reserves multiplied by Price Per thousand cubic feet multiplied by Royalty Rate = Estimated Projected Royalty Revenue on (Value of) Proved Gas Reserves as of the end of the current reporting period.

5. Do Board members agree with the method of recording the initial value of proved oil and gas reserves as an asset? That is, to recognize a "change in accounting principle" upon capitalization.

OIL AND GAS PROPOSAL

Staff Proposal

Pursue capitalization of proved oil and gas reserves from lands under Federal jurisdiction. The estimated value would be based on quantity information provided by the Energy Information Administration (EIA), Department of Energy. Further staff research is needed before staff proposes a measurement attribute (e.g., current value versus net present value). The following pages provide:

1. An overview of the EIA's mission;
2. Valuing the proved oil and gas reserves;
3. Recognition of proved oil and gas reserves as assets; and,
4. Pending questions and/or issues regarding asset valuation, revenue recognition, and asset revaluation.

1. EIA OVERVIEW

The primary focus of EIA's reserves program is providing accurate annual estimates of U.S. proved reserves of crude oil¹, dry natural gas², and natural gas liquids³. These estimates are essential to the development, implementation, and evaluation of national energy policy and legislation. In the past, the Government and the public relied upon industry estimates of proved reserves. However, the industry ceased publication of reserve estimates after its 1979 report.

In response to a recognized need for credible annual proved reserves estimates, Congress, in 1977, required the Department of Energy to prepare such estimates. To meet this requirement, the EIA developed a program that established a unified, verifiable, comprehensive, and continuing annual statistical series for proved reserves of crude oil and natural gas. It was expanded to include proved reserves of natural gas liquids for the 1979 and subsequent reports.

Proved reserves estimates are based on data filed by: 1) large, intermediate, and a select group of small operators of oil and gas wells; and, 2) operators of all natural gas processing plants. The U.S. crude oil and natural gas proved reserves estimates are associated with sampling errors of less than 1 percent at a 95-percent confidence level.

¹ Crude oil is a mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Crude oil may also include: 1) small amounts of hydrocarbons that exist in the gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well gas in lease separators, and that subsequently are commingled with the crude oil stream without being separately measured; and, 2) small amounts of nonhydrocarbons produced with the oil.

² Dry natural gas is the actual or calculated volumes of natural gas which remain after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); or, any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable.

³ Natural gas liquids are those hydrocarbons in natural gas, which are separated from the gas through the processes of absorption, condensation, adsorption, or other methods in gas processing or cycling plants. Generally such liquids consist of propane and heavier hydrocarbons and are commonly referred to as condensate, natural gasoline, or liquefied petroleum gases.

The published reserves estimates include an additional term, adjustments, calculated by the EIA, that preserves an exact annual reserves balance. Adjustments are the annual changes in the published reserve estimates that cannot be attributed to the estimates for other reserve change categories. They result from the survey and statistical estimation methods employed. For example, variations caused by changes in the operator frame, different random samples, different timing of reporting, incorrectly reported data, or imputations for missing or unreported reserve changes can contribute to adjustment. Estimated proved reserves are calculated in the following manner:

Published Proved Reserves at End of Previous Report Year
+ Adjustments
+ Revision Increase
-- Revision Decreases
-- Sales
+ Acquisitions
+ Extensions
+ New Field Discoveries
+ New Reservoir Discoveries in Old Fields
-- Report Year Production
= Published Proved Reserves at End of Report Year

Currently, the EIA does not breakout and distinguish between the quantity of the proved reserves from lands under Federal jurisdiction and the quantity of proved reserves from other lands. During its research, staff learned that the EIA has now been tasked with the requirement to provide this information. Therefore, because estimates of proved oil and gas reserves from lands under Federal jurisdiction would be available, staff proposes that an estimated value for proved oil and gas reserves from lands under Federal jurisdiction be capitalized in place of capitalizing the anticipated production stage revenue stream.

2. VALUATION OF PROVED OIL AND GAS RESERVES

The EIA defines proved reserves as those volumes of oil and gas that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

When deterministic proved reserves estimation methods are used, the term reasonable certainty is intended to express a high degree of confidence that the estimated quantities will be recovered. When probabilistic methods are used there should be at least a 90 percent probability that the actual quantities recovered will exceed the estimate.

Proved reserves are either proved producing or proved nonproducing (i.e., resident in reservoirs that did not produce during the report year). The latter may represent a substantial fraction of total proved reserves. Therefore, the quantity of proved reserves used as the basis for capitalization would be proved producing or proved nonproducing reserves from lands under Federal jurisdiction.

Presented on the following page are the proposed formulae used to estimate the capitalization value for proved oil and gas reserves.

Oil⁴

For the estimated value of proved oil reserves, the following formula would be used:

Barrels of Proved Oil Reserves multiplied by Price Per Barrel multiplied by Royalty Rate =
Estimated Projected Royalty Revenue on (Value of) Proved Oil Reserves as of the end of the
current reporting period.

Example

Barrels of Proved Oil Reserves on federal land: XX,XXX,XXX,XXX⁵

X Price Per Barrel: \$23. 38⁶

X Royalty Rate: .0937⁷

= Estimated Projected Royalty Revenue
on (Value of) Proved Oil Reserves
as of the end of the current reporting period. \$XX.XXX Billion

Gas

For the estimated value of proved gas reserves, the formula would be used:

Cubic Feet of Proved Gas Reserves on federal land multiplied by Price Per thousand cubic feet
multiplied by Royalty Rate = Estimated Projected Royalty Revenue on (Value of) Proved Gas
Reserves as of the end of the current reporting period.

Example

Cubic Feet of Proved
Gas Reserves on federal land: XXX,XXX,XXX,XXX,XXX⁸

X Price Per thousand cubic feet \$3.41⁹

X Royalty Rate: .1157¹⁰

= Estimated Projected Royalty Revenue
on (Value of) Proved Gas Reserves
as of the end of the current reporting period. \$XX.XXX Billion

⁴ Proved "natural gas liquids" reserves are included in the proved oil reserves.

⁵ Quantity information from the Energy Information Administration.

⁶ Information the Minerals Management Service (MMS), Department of Interior, obtains from the Office of Management and Budget (OMB).

⁷ Information from the Minerals Management Service (MMS), Department of Interior.

⁸ Quantity information from the Energy Information Administration.

⁹ Information the Minerals Management Service (MMS), Department of Interior, obtains from the Office of Management and Budget (OMB).

¹⁰ Information from the Minerals Management Service (MMS), Department of Interior.

3. ASSET RECOGNITION

Assets Definition

Using the Financial Accounting Standards Board's (FASB's) definition of assets¹¹ as a basis, staff believes proved oil and gas reserves meet the definition of assets. That is, they possess the three essential characteristics of an asset. The proved reserves: a) represent a probable future benefit that involves a capacity to contribute to future net cash inflows; b) the Federal government controls the benefit and other's access to it; and, c) the event, or events, allowing exploitation of the proved reserves has occurred.

Recognition Criteria

FASAB's definition of recognition states "The term recognition bears the same meaning as used by the Financial Accounting Standards Board in its conceptual statements. In FASB CON5, Par. 63 states that an item and information about it should meet four fundamental recognition criteria to be recognized and should be recognized when the criteria are met, subject to a cost-benefit constraint and a materiality threshold. Staff believes proved reserves should be formally recorded into the financial statements because they: a) possess the three essential characteristics of assets; b) can be quantified with a high degree of confidence using estimation methods; c) are capable of making a difference in user decisions; and, d) on the basis of the valuation formulae, are representationally faithful, verifiable, and neutral.

Record "proved oil and gas reserves" asset

The proposal, presented below, to record the initial value of proved oil and gas reserves is consistent with the guidance given to record the initial value of national defense property, plant, and equipment (PP&E) as general PP&E.

Proved Oil and Gas Reserves would be recorded as an asset. The cumulative effect of adopting this accounting standard would be reported as a "change in accounting principle." The adjustment would be made to the beginning balance of cumulative results of operations in the statement of changes in net position, for the period the change is made.

Prior year financial statements presented for comparative purposes would be presented as previously reported.

The nature of the changes in accounting principle and its effect on relevant balances would be disclosed in the current period. Financial statements of subsequent periods need not repeat the disclosure.¹²

4. PENDING QUESTIONS

Presented below are pending initial questions and/or issues that would have to be addressed if the Board agrees to the proposal of capitalizing proved oil and gas reserves. These questions

¹¹ Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.

¹² SFFAS 21, *Reporting Corrections of Errors and Changes in Accounting Principles*, paragraphs 12 and 13.

and/or issues are not expected to be resolved during the March meeting. Further staff research is needed before staff provides alternatives and proposed recommendations:

1. Should proved oil and gas reserves be valued using a current value measurement attribute, a present value measurement attribute, or some other measurement attribute?
2. Should the value of proved reserves be only the estimated amount that will be transferred to Treasury for ultimate deposit in the general fund? Or, should the value of proved reserves include the estimated amount to be transferred to the Treasury plus the amounts to be transferred to Federal special funds plus the States?
3. Should the value of proved oil and gas reserves be amortized based on the royalty collections made throughout the reporting period? Or, should the value of proved reserves remain constant throughout the reporting period with royalty collections accounted for as custodial collections as they are now?
4. How should the year-end remaining value of proved reserves be adjusted due to depletion of reserves throughout the year and the identification of new proved reserves?
5. How should foregone or suspended royalties be addressed in this accounting standard, if possible?
6. A new fund (Treasury account symbol) would need to be provided.

Comparison of Natural Resources Collections
(In millions)

Gas	\$5,372
Oil	2,373
Other Leasable and Saleable Minerals ¹³	44
Timber	26
Locatable Minerals ¹⁴	19
Grazing	13
Total	\$7,847

¹³ Generally occur in a solid state and include asphalt, sulfur, phosphate, potassium, sodium, gilsonite, and other minerals.

¹⁴ This includes precious metals, ferrous metals, light metals, base metals, precious and semi-precious gemstones, and a vast array of industrial minerals.

4. Revised Proposed Disclosure Requirements

Presented below are the revised proposed disclosure requirements presented and discussed at the December Board meeting. Staff believes that, based on the proposal presented in this paper, the sections of the proposed disclosures which staff was asked to revise during the December meeting are no longer relevant. As a result, staff proposes to delete them. The proposed deletions are marked with a ~~strikeout~~.

DISCLOSURE REQUIREMENTS

Entities responsible for managing the Federal offshore or Federal onshore oil and gas resources should reference a note¹⁵ on the balance sheet that discloses information about the oil and gas resources, but no asset dollar amount should be shown. The note disclosure related to oil and gas resources should provide the following:

- a) A concise statement explaining how the management of oil and gas resources is important to the overall mission of the entity.
- b) A brief description of the entity's stewardship for oil and gas resources. The stewardship policies for oil and gas resources are the guiding principles established to: assess oil and gas resource areas; develop a plan for offering those resources to interested developers (including a brief discussion about lands withdrawn from lease sales); sell and assign leases to winning bidders; administer the leases; collect bonuses, rents, royalties, and royalty-in-kind; and, distribute the collections consistent with statutory requirements, prohibitions, and limitations governing the entity and the oil and gas resources.
- ~~c) Bonus, rent, and royalty collections by land category and resource for the reporting period and a brief overview of the collection process.~~
- ~~d) Trend information, for the reporting period and 4 previous years, showing the collection amount distributed to each recipient by fiscal year and a brief overview of the distribution process.~~
- ~~e) Projected production volumes and collections (gross or net to Treasury General Fund or both), including an explanation for any adjustments to the projections, for each of the 5 years following the current reporting period and a brief overview of the projection information.~~

Staff Note: This proposed standard is silent with respect to disclosures related to fiduciary oil and gas activities (e.g., American Indian). Staff is working to ensure that the fiduciary activities standards – currently under review – result in the same disclosures for **fiduciary** oil and gas activities as proposed here for federally owned oil and gas activities. Staff believes that disclosures for fiduciary oil and gas activities are best presented as an integral part of the fiduciary activities disclosures.

¹⁵ The Board is not prescribing a specific reference or line item "Oil and Gas Resources" as it may be included with other items for which no dollar amounts are recognized (such as heritage assets and other items that in the future may require similar non-financial disclosure) for presentation. Instead, the Board prefers to allow entities flexibility in determining the best presentation.

U.S. Government-wide Financial Statement Disclosures¹⁶

The U.S. Government-wide financial statement should reference a note on the balance sheet that discloses information about oil and gas resources, but no asset dollar amount should be shown. The note disclosure related to oil and gas resources should provide the following:

- a. A concise statement explaining how oil and gas resources are important to the overall mission of the Federal Government and a brief description about the leasing of Federal lands and revenue collections.
- b. A general reference to agency reports for additional information about oil and gas resources, such as agency stewardship and accounting policies for oil and gas resources and the collection and distribution of oil and gas resource collections.

¹⁶ ²⁰ SFFAS 24, *Selected Standards for the Consolidated Financial Report of the United States Government*, clarified that all existing and future standards apply to all Federal entities, including the U.S. Government-wide Financial Statement, unless a standard specifically provides otherwise.